resist infection, but they may be an indication of increased susceptibility to infection and imperfect reaction against it. Thirty-six splenectomized rats were used together with thirty-six controls. It was observed that the splenectomized animals almost invariably died before the controls when they were exposed to chance laboratory contagion, the death-rate among the splenectomized animals being 80.5 per cent. as compared to 38.9 per cent. in the controls. Their results after numerous carefully controlled experiments show in a very definite manner that while the animals get along fairly well without a spleen in the absence of any infection, the reverse is the case when the organism is put to the strain of resisting acute bacterial invasion. Under the circumstances they infer that the spleen normally aids tremendously in resisting infectious processes in rats, and that its removal temporarily robs the body of its resistance until such a time, at least, as compensatory processes will have a chance to reëstablish this.

THERAPEUTICS

UNDER THE CHARGE OF

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Arterial Hypertension.—ALLEN (*Jour. Am. Med. Assn.*, 1920, lxxiv, 652) deals in this article particularly with the restriction of salt and fluid as therapeutic agents in the treatment of hypertension. He believes that suitable chloride restriction is a great factor in making patients with hypertension more comfortable, diminishing the danger of apoplexy and possibly checking the progressiveness of the disorder. By far the best results are obtained in the earliest cases when the hypertension is intermittent rather than continuous. Early diagnosis, therefore, is important, and Allen hopes that chemical tests, such as for blood chlorides and chloride threshold (the normal values of which are still undecided), may help in the early diagnosis. The practical application of low chloride and diminished fluid intake has certain limitations, which he mentions: (1) A diet reasonably satisfying, and at the same time poor in salt, is a difficult diet to arrange. (2) A certain quantity of salt is considered indispensable in a permanent ration. This is stated as approximately 2 gm. for normal individuals. The limits have not been determined for nephritis patients. The chief untoward effect of salt deprivation is weakness, and it is therefore necessary to work out salt rations for individual nephritic patients. (3) Such restriction of salt or fluid is only palliative, and success is not as universal as, for instance, in the treatment of diabetes.

The Role of Carbohydrates in the Treatment of Toxemia of Early Pregnancy.—Titus, Hoffmann and Givens (*Jour. Am. Med. Assn.*, 1920, lxxiv, 777) discuss the subject of the treatment of the toxemias of pregnancy. They are convinced, from their clinical experience, that liberal carbohydrate feeding is beneficial in the treatment of this disturbance. Mild cases of nausea and vomiting may be controlled by increasing the carbohydrates of the diet and an avoidance of more than short intervals of fasting by the taking of food more frequently. Increased carbohydrate intake is obtained by giving the patient from 8 to 16 ounces of a 10 per cent. glucose and 2 per cent. sodium bicarbonate solution daily by mouth. More severe cases may require increased quantities of this solution, given both by mouth and by rectum. They give to seriously toxic patients additional carbohydrate, easily utilizable, by intravenous injection of from 15 to 25 gm. of glucose in from 250 to 300 c.c. of water. This is given from one to three times daily. They believe that the intravenous injection of glucose solution is a valuable therapeutic measure, and also that the rate of its absorption and storage by the liver is an index of liver efficiency that is of prognostic value.

Protein Diets and Undernutrition in the Treatment of Diabetes.—Allen (*Jour. Am. Med. Assn.*, 1920, lxxiv, 571) states that a possible diet after fasting is one composed wholly or chiefly of protein, and this plan has seemed the most useful for maintaining strength during the period of undernutrition necessary for attaining a normal blood-sugar. Actual suffering from hunger is prevented by the use of materials to furnish bulk (bran, agar, celluflour, "India gum," liquid petrolatum, soups, small quantities of thrice-boiled vegetables), without which such low diets would scarcely be practicable. In some elderly patients slight hyperglycemia and nitroprusside reactions may be permissible to avoid undue hardships, but diabetes after the age of forty is by no means always benign, and not infrequently requires stringent measures to control it, especially after long neglect. The more severe the diabetes and the younger the patient the more rigorously should hyperglycemia and all other symptoms be controlled from the outset. Such a policy often means a considerable reduction of weight and strength as compared with the level which can be maintained temporarily by higher diets, and its justification depends on the belief that patients are best off in the long run when their weakened function is spared as thoroughly as possible.

Treatment of Bronchial Asthma.—Gottlieb (*Jour. Am. Med. Assn.*, 1920, lxxiv, 931) discusses the treatment of bronchial asthma from its various standpoints, climatic, specific and drug. He believes that the climatic treatment is only of value in cases of asthma due to anaphylaxis to various pollens and that the beneficial effect is due to removal of the exciting cause. Patients who are anaphylactic to foods are benefited by the elimination of such articles from their diet. Those patients who are sensitive to bacterial proteins alone, or, as frequently occurs, complicated by food anaphylaxis, frequently receive benefit from bacterial vaccines. In case the vaccine treatment subcutaneously has no effect, intravenous injections should be tried. Great care is necessary in the administration of the proper dose. The author is of the opinion that in about 50 per cent. of the cases of hay-fever asthma the attack can be controlled by prophylactic and specific treatment. It is essential that the degree of sensitiveness be determined before administering the treatment. This may be done by testing the patient with varying dilutions of the pollen extract. He considers that it is better to give the treatment throughout the year rather than a short period of treatment during the hay-fever season. Regarding drug therapy, the author speaks of the beneficial effect of epinephrin given hypodermically in dilutions of 1 to 1000 in controlling the acute attack of dyspnea. The effects generally last for from one-half to two hours. As a rule, patients gradually become accustomed to repeated doses of epinephrin, so that the amount given has to be increased from time to time, and finally often a complete tolerance to the drug is developed and no relief is obtained from its administration. Atropin given subcutaneously or intramuscularly in gradually increasing doses up to the point of tolerance will frequently give relief. KI by mouth is frequently of distinct value. The inhalation of fumes of burning stramonium leaves and potassium nitrite gives relief in acute paroxysms.

PEDIATRICS

UNDER THE CHARGE OF

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A Case of Hypersensitiveness to Cows' Milk.—Park (*Am. Jour. Dis. Children*, January, 1920), reports a case of a child who is now three years old. At six weeks it was given a supplementary feeding of a cow's milk formula once a day. It took about one ounce, amounting to about 10 c.c. of cow's milk. It fell asleep and when aroused it vomited. It was very pale and heavy. It refused the next breast nursing, and vomited again, after which it fell into a heavy sleep. It took the next breast feeding and the next day it seemed normal. Thinking that the baby was hypersensitive to cow's milk it was given a teaspoonful of a mixture of milk diluted one-half with water. After taking this it was nursed and immediately fell asleep. It occasionally opened its eyes and yawned. The face became flushed. About five hours after taking the mixture it vomited in small amount, and ten minutes later it vomited a large amount of bile-stained fluid. It became exceedingly pale and seemed greatly prostrated. Shortly after vomiting it had two large loose stools containing mucus. It refused the next nursing, and slept heavily until the next nursing period when it nursed in a normal manner. After cutaneous test there were delayed general reactions locally, the tests were negative. It was able to take goat's milk without any difficulty. Intracutaneous tests of various proteins were done and gave slight local and delayed general reactions. There was a